

## AMENDMENTS TO THE CLAIMS

1-10. (Cancelled)

11. (Currently Amended) ~~A~~ ~~The~~ wireless communication system ~~of~~  
~~claim 10~~ comprising:  
a radio module operable to communicate data between a host and at least one  
external device;  
at least one digital module operable to process data communicated by said radio  
module;  
a clock generator for generating first and second clock signals for use by said  
digital module;  
a timer operable to count clock cycles of said first and second clock signals;  
power management logic operable to:  
control said clock generator to cause said clock generator to generate said  
first clock signal when said wireless communication system is  
operating in a first power mode and to generate said second clock  
signal when said wireless communication system is operating in a  
second power mode; and  
calibrate the frequency of said clock generator while said wireless  
communication system is operating in said second power mode;  
and  
a timer management module operable to maintain a cumulative count of the  
number of clock cycles counted by said timer during a predetermined time  
interval, wherein said timer is operable to count the number of clock  
cycles for said first clock when said wireless communication system is  
operating in said first power mode and is further operable to count the  
number clock cycles for said second clock signal when said wireless  
communication system is operating in said second power mode;  
wherein the number of clock cycles counted by said timer when said wireless  
communication system is operating in said second power mode is

28 converted to an equivalent number of clock cycles that would have been  
29 generated by said first clock by using an adjustment factor based on the  
30 number of cycles said first clock would generate during a single cycle of  
31 said second clock.

1 12. (Cancelled)

1 13. (Currently Amended) A The wireless communication system, of  
2 ~~claim 12~~ comprising:  
3 a radio module operable to communicate data between a host and at least one  
4 external device;  
5 at least one digital module operable to process data communicated by said radio  
6 module;  
7 a clock generator for generating first and second clock signals for use by said  
8 digital module;  
9 a timer operable to count clock cycles of said first and second clock signals, said  
10 timer operable to count the number of clock cycles for said first clock  
11 when said wireless communication system is operating in said first power  
12 mode and said timer does not count the number of clock cycles for said  
13 first clock signal when said wireless communication system is operating in  
14 said second power mode;  
15 a timer management module operable to maintain a cumulative count of the  
16 number of clock cycles counted by said timer during a predetermined time  
17 interval, wherein said timer management module is operable to generate  
18 updated timing information using information provided by said power  
19 management logic regarding the duration of the time interval that said  
20 wireless communication system is operating in said second power mode;  
21 and  
22 power management logic operable to:  
23 control said clock generator to cause said clock generator to generate said  
24 first clock signal when said wireless communication system is

25                    operating in a first power mode and to generate said second clock  
26                    signal when said wireless communication system is operating in a  
27                    second power mode; and  
28                    calibrate the frequency of said clock generator while said wireless  
29                    communication system is operating in said second power mode.

1                    14-23. (Cancelled)

1                   24.     (Currently Amended) A The method of claim 23 of managing  
2 power in a wireless communication system having a radio module operable to  
3 communicate data between a host and at least one external device and at least one  
4 digital module operable to process data communicated by said radio module, the  
5 method comprising:  
6         generating a high-frequency first clock signal for use by said digital module when  
7         said wireless communication system is operating in a first power mode  
8         and a lower frequency second clock signal for use by said digital module  
9         when said wireless communication system is operating in a second power  
10        mode; and  
11        using power management logic to:  
12            control said clock generator to cause said clock generator to generate said  
13            first clock signal when said wireless communication system is  
14            operating in a said first power mode and to generate said second  
15            clock signal when said wireless communication system is  
16            operating in said second power mode; and  
17            calibrate the frequency of said clock generator while said wireless  
18            communication system is operating in said second power mode  
19        using a timer to count clock cycles of said first and second clock signals;  
20        using said timer to count the number of clock cycles for said first clock when said  
21        wireless communication system is operating in said first power mode and  
22        using said timer to count the number clock cycles for said second clock  
23        signal when said wireless communication system is operating in said  
24        second power mode;  
25        and  
26        using a timer management module to maintain a cumulative count of the number  
27        of clock cycles counted by said timer during a predetermined time  
28        interval, wherein the number of clock cycles counted by said timer when  
29        said wireless communication system is operating in said second power  
30        mode is converted to an equivalent number of clock cycles that would

31 have been generated by said first clock by using an adjustment factor  
32 based on the number of cycles said first clock would generate during a  
33 single cycle of the said second clock.

1 25. (Cancelled)

1 26. (Currently Amended) A The method of claim 25, further of  
2 managing power in a wireless communication system having a radio module operable  
3 to communicate data between a host and at least one external device and at least one  
4 digital module operable to process data communicated by said radio module, the  
5 method comprising:  
6 generating a high-frequency first clock signal for use by said digital module when  
7 said wireless communication system is operating in a first power mode  
8 and a lower frequency second clock signal for use by said digital module  
9 when said wireless communication system is operating in a second power  
10 mode; and  
11 using power management logic to:  
12 control said clock generator to cause said clock generator to generate said  
13 first clock signal when said wireless communication system is  
14 operating in a said first power mode and to generate said second  
15 clock signal when said wireless communication system is  
16 operating in said second power mode; and  
17 calibrate the frequency of said clock generator while said wireless  
18 communication system is operating in said second power mode  
19 using a timer to count clock cycles of said first and second clock signals, wherein  
20 said timer counts the number of clock cycles for said first clock when said  
21 wireless communication system is operating in said first power mode and  
22 said timer does not count the number of clock cycles for said first clock  
23 signal when said wireless communication system is operating in said  
24 second power mode;

25        using a timer management module to maintain a cumulative count of the number  
26                of clock cycles counted by said timer during a predetermined time  
27                interval; and  
28        using said timer management module to generate updated timing information  
29                using information provided by said power management logic regarding the  
30                duration of the time interval that the wireless communication system is  
31                operating in said second power mode.